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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,176	12/21/2001	Michael W. Pfeiffer	P1572US01	6111
7590	06/08/2004		EXAMINER	
Fellers, Snider et al Bank One Tower 100 N. Broadway, Ste. 1700 Oklahoma, OK 73102-8820			KIM, PAUL D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/032,176	<b>Applicant(s)</b> PFEIFFER, MICHAEL W.	
	<b>Examiner</b> Paul D Kim	<b>Art Unit</b> 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 14 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-13 and 15-17 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-10 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/21/01</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is a response to the election of species filed on 4/28/04.

#### ***Response to the Election of Species***

2. Applicant's election without traverse of Species A, claims 1, 2, 4-13 and 15-20 filed on 4/28/04 is acknowledged.
3. Claims 3 and 14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse filed on 4/28/04.

#### ***Claim Objections***

4. Claims 18-20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claim(s) in independent form. The claims 18-20 appear to be dependent claims of claims 11.
5. The phrase "a locked position" recited in 7-8 of claim 1 appears to be --the locked position--.

#### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3729

7. Claims 1, 2, 4-10 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re. claim 1: The phrase "the locking arm is normally in a locked position" recited in 7-8 renders claims vague and indefinite. It is unclear whether the locking arm is in the locked position or not. Clarification is required.

Re. claim 5: The phrases "the work object" and "the first end" recited in line 3 lacks antecedent basis.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker et al. (US PAT. 4,486,928).

Tucker et al. teach an apparatus for tool used at workstation comprising: a frame (30 including a base portion); a movable robotic arm (20) which projects from the frame as shown in Fig. 1; a locking arm (26) movable between a locked position and an unlocked position (equivalent with a free movement for unlocked position and a stop movement for locked position of the locking arm) having an engagement portion (32) toward an alignment position relative to the frame; an end effector (36) attached to the

Art Unit: 3729

robotic arm capable of supporting the control object (70); and a plunger (34) coupled to the locking arm capable of engaging an alignment feature associated with a desired placement of the control object as shown in Fig. 1 (see also col. 3, lines 10-62). Even though Tucker et al. do not disclose teach a locking arm movable between a locked position and an unlocked position, it would also have been obvious at the time the invention was made to a person having ordinary skill in the art to have provided the locking arm movable between a locked position as a stop movement of the locking arm and an unlocked position as a free movement of the locking arm in order to transfer the object into the desired position.

As per claim 4 Tucker et al. teach a controller (equivalent with a programmed sequencer, 44 as shown in Fig. 1) to control the end effector for the placement of the object.

**NOTE:** The phrase “a plunger coupled to the locking arm and configured to engage an alignment feature associated with a desired placement of the control object, wherein the engagement portion maintains the end effector in a substantially noncompliant condition when the locking arm is in the locked position and wherein pressing engagement of the plunger against the alignment feature causes the locking arm to move to the unlocked position to introduce compliance into the end effector to allow freedom of movement of the end effector relative to the control object” recited in lines 11-18 is **functional language**.

***Allowable Subject Matter***

10. Claims 2, 5-10 and 18-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claims 11-13 and 15-17 are allowed.

12. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose the claimed invention such as the engagement portion of the locking arm comprises a first end of the locking arm, wherein the locking arm further comprises a medial portion and a second end, wherein the medial portion of the locking arm is pivotally affixed to the robotic arm, and wherein the first end of the locking arm is configured to engage the frame in a ball and socket arrangement when the locking arm is in the locked position as per claim 2 and a socket affixed to a selected one of the frame and the locking arm; a socket ball affixed to the remaining one of the frame and the locking arm as per claim 11.

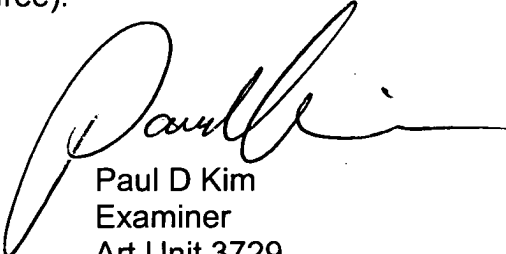
***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356. The examiner can normally be reached on Tuesday-Friday between 8:00 AM to 5:30 PM.

Art Unit: 3729

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim  
Examiner  
Art Unit 3729